THE USE AND IMPORTANCE OF FIRE IN LONGLEAF RESTORATION

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ABSTRACT: Longleaf ecosystems evolved under a chronic fire regime. The continual presence of fire is required to keep them healthy. When managing longleaf pine ecosystems it is not a question of whether or not to use fire, but instead a question of the frequency, intensity and season of application needed to accomplish specific objectives. This talk first describes the root, bole, and crown characteristics that make longleaf pine one of the most fire resistant trees on our planet. Next comes a discussion of how managers can take advantage of these traits when planning a burn. The influence of fire frequency, fuel accumulation, weather parameters including season, and firing technique upon fire intensity and severity is touched upon. Some suggestions on when and how to apply fire to achieve both aesthetic and product-oriented objectives, such as brownspot needle blight, are given. Our responsibilities to assure we continue to have the freedom to determine where, when and how we use prescription fire are stressed. Six keys to sustain the longleaf pine ecosystem are: 1) no matter how precarious the situation, fire must be used - either alone or in combination with chemical or mechanical treatment - to perpetuate longleaf ecosystems; 2) the situation is likely to get worse the longer you wait; 3) worry more about a diverse groundcover of indigenous species rather than the overstory; 4) burn variability is of prime importance; 5) strive to use fire judiciously; and 6) take every opportunity to educate the public about the necessity of fire in fire-dependent ecosystems.

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